



April 13, 2006

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Mr. John O'Brien  
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The following quarterly report updates the Energy Conservation Plan (ECP) and Fleet Fuel Management Plan in accordance with Executive Order RP-49, submitted November 30, 2005.

1. TTUHSC has achieved the reduction goal by containing forecasted increase of energy usage to less than 5% of the prior year. Fleet fuel management practices achieved a reduction of 8.49% of miles driven and 7.09% gasoline used exceeding the 1% goal.
2. Additional steps to increase percentage reduction goal. In the context of minimizing the impact of RP-49 on mission essential activities, the following steps may be considered advisedly, to achieve further reductions. It can be stated that the practices previously submitted will be ongoing and are a priority for continuing operations with an effort to minimize the impact on the institution's program. The following additional steps may be taken to reduce energy consumption but will adversely impact mission and should be considered temporary in nature:
  - Reduce lighting in facilities by removing a percentage of the lamps from fixtures;
  - Reduce the hours that air handling units are in operation;
  - Alter the temperature control settings in the direction of reduced consumption;
  - Modify the hours of operations for TTUHSC;
  - Capital expenditures for energy conservation projects and to reduce consumption by applying current Energy Conservation Codes and Standards.
3. Additional ideas for reducing facilities energy expenditures: In the context that energy conservation has been an ongoing process, seeking operating strategies that are commensurate with delivering programs, TTUHSC enforces energy conservation design in all new renovation projects. It is noted that weather conditions along with continuing operating practices will continue to influence containment of energy usage and expenditures. TTUHSC is in a facility growth mode and will continue to employ best design practices and operating strategies to include TAB, commissioning and retrocommissioning as resources to efficiently use energy in its facilities. Capital projects with favorable ROI's will continue to be analyzed for cost efficient implementation.





4. Additional ideas to minimize fuel usage TTUHSC plans to continue its current practices and fleet driving practice education program, to maintain its fleet operation reduction in miles drive. Fleet operations, mileage driven and fuel costs are rigorously monitored with reporting to fleet operators to encourage trip efficiency and economy. Additionally:
  - TTUHSC will continue advising vehicle custodians of the program and work with them on steps to improve beyond the reductions of the first quarter. Efforts will be focused on reducing the number of vehicle daily trips to the same locations.
  - Vehicle custodians will be reminded of the suggested age replacement guidelines for replacing older vehicles with newer more fuel efficient units. Departments will be encouraged to consider gasoline / electric hybrid vehicles.

Attached are Exhibits that reflect Energy Usage and Equivalentents.

Respectfully Submitted,

W.R. Ward  
Assistant Vice President Physical Plant

XC Elmo M. Cavin  
Executive Vice President Finance and Administration



## Exhibit 1

### TTUHSC'S 2005 ACTUAL ENERGY CONSUMPTION

<u>ENERGY</u>	1st Quarter FY 2005	2nd Quarter FY 2005	3rd Quarter FY 2005	4th Quarter FY 2005	Total FY 2005
ELECTRICITY, mbtu	32,508,607	30,211,627	31,513,850	35,314,471	129,548,555
NATURAL GAS, mbtu	8,249,494	14,479,586	8,174,964	3,903,419	34,807,463
THERMAL ENERGY*, mbtu	<u>51,705,150</u>	<u>51,390,289</u>	<u>52,642,533</u>	<u>62,285,042</u>	<u>218,023,014</u>
ENERGY EQUIVALENT, mbtu	<u>92,463,251</u>	<u>96,081,501</u>	<u>92,331,348</u>	<u>101,502,932</u>	<u>382,379,032</u>

\*Natural Gas is used to produce the Thermal Energies of Steam and Chilled Water

### TTUHSC'S 2006 ACTUAL ENERGY CONSUMPTION

<u>ENERGY</u>	1st Quarter FY 2006	2nd Quarter FY 2006	3rd Quarter FY 2006	4th Quarter FY 2006	Total FY 2006
ELECTRICITY, mbtu	32,059,306	30,147,401			62,206,707
NATURAL GAS, mbtu	6,579,611	12,309,375			18,888,986
THERMAL ENERGY*, mbtu	<u>55,568,748</u>	<u>57,194,734</u>			<u>112,763,482</u>
ENERGY EQUIVALENT, mbtu	<u>94,207,665</u>	<u>99,651,510</u>			<u>193,859,175</u>

\*Natural Gas is used to produce the Thermal Energies of Steam and Chilled Water

### TTUHSC'S ENERGY CONSUMPTION VARIANCE % 2006 PLAN WITH 1% REDUCTION GOAL OVER/(UNDER) 2005 ACTUAL

<u>ENERGY</u>	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	YEARLY VARIANCE
ELECTRICITY	-0.3%	2.1%	0.7%	0.4%	0.7%
NATURAL GAS	-15.2%	4.1%	5.3%	-12.9%	-2.1%
THERMAL ENERGY*	<u>0.0%</u>	<u>6.9%</u>	<u>-2.7%</u>	<u>-6.1%</u>	<u>-0.8%</u>
ENERGY EQUIVALENT	<u>-1.5%</u>	<u>5.0%</u>	<u>-0.8%</u>	<u>-4.1%</u>	<u>-0.4%</u>

\*Natural Gas is used to produce the Thermal Energies of Steam and Chilled Water

### TTUHSC'S 2006 ACTUAL OVER/(UNDER) 2005 ACTUAL

<u>ENERGY</u>	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
ELECTRICITY, mbtu	-1.4%	-0.2%			-0.8%
NATURAL GAS, mbtu	-25.4%	-17.6%			-20.3%
THERMAL ENERGY*, mbtu	<u>7.0%</u>	<u>10.1%</u>			<u>8.6%</u>
ENERGY EQUIVALENT, mbtu	<u>1.9%</u>	<u>3.6%</u>			<u>2.7%</u>

\*Natural Gas is used to produce the Thermal Energies of Steam and Chilled Water

## Exhibit 2

### 2005 ACTUAL ENERGY CONSUMPTION

<b><u>ENERGY</u></b>	1st Quarter <u>FY 2005</u>	2nd Quarter <u>FY 2005</u>	3rd Quarter <u>FY 2005</u>	4th Quarter <u>FY 2005</u>	Total <u>FY 2005</u>
ELECTRICITY, kwh	9,524,936	8,851,927	9,233,475	10,347,047	37,957,385
NATURAL GAS, ccf	80,248	140,852	79,523	37,971	338,594
STEAM, mlb	20,562	32,167	23,739	14,438	90,906
CHILLED WATER, tn-hr	<u>2,384,502</u>	<u>1,272,229</u>	<u>2,165,303</u>	<u>3,839,264</u>	<u>9,661,298</u>
THERMAL ENERGY*, mbtu	51,705,150	51,390,289	52,642,533	62,285,042	218,023,014
ENERGY EQUIVALENT, mbtu	<u>92,463,251</u>	<u>96,081,501</u>	<u>92,331,348</u>	<u>101,502,932</u>	<u>382,379,032</u>

\*Natural Gas is used to produce the Thermal Energies of Steam and Chilled Water

### 2006 ACTUAL ENERGY CONSUMPTION

<b><u>ENERGY</u></b>	1st Quarter <u>FY 2006</u>	2nd Quarter <u>FY 2006</u>	3rd Quarter <u>FY 2006</u>	4th Quarter <u>FY 2006</u>	Total <u>FY 2006</u>
ELECTRICITY, kwh	9,393,292	8,833,109			18,226,401
NATURAL GAS, ccf	64,004	119,741			183,745
STEAM, mlb	21,660	31,858			53,518
CHILLED WATER, tn-hr	<u>2,603,714</u>	<u>1,784,850</u>			<u>4,388,564</u>
THERMAL ENERGY*, mbtu	55,568,748	57,194,734			112,763,482
ENERGY EQUIVALENT, mbtu	<u>94,207,665</u>	<u>99,651,510</u>			<u>193,859,175</u>

\*Natural Gas is used to produce the Thermal Energies of Steam and Chilled Water